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an antenna pattern formed on the flexible substrate;
a matching circuit element formed on the first flexible substrate and configured to substantially match the impedance of the antenna pattern with the impedance of the radio unit;
a capacitive coupling element configured to couple the antenna pattern with the matching circuit by a capacitive coupling; and
a second flexible substrate arranged within said holding unit, said matching circuit element being formed on said second flexible substrate and said capacitive coupling element being formed between said first and second flexible substrates.

REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 1, 4, 8, and 10-16 are pending in this application. Claims 2, 3, 5, and 9 have been canceled without prejudice or disclaimer. Claims 1, 4, 6-8, and 10-15 have been amended to include the subject matter of various ones of Claims 2, 5, and 9 and Claim 16 has been added to include the subject matter of Claim 3, all without introducing any new matter.

The outstanding Office Action presents an objection to FIG. 1, an objection to page 17, line 22 of the specification, an objection to Claims 1, 4, and 9, a rejection of Claims 1-7 and 13-15 under the second paragraph of 35 U.S.C. §112, a rejection of Claims 1 and 13 as being anticipated by Suguro et al (U.S. Pub. No. 2002/0008663, Suguro) under 35 U.S.C. §102(e), a rejection of Claims 4, 6-8, 10-12, and 15 as being unpatentable over Suguro in view of Wass (U.S. Patent No. 6,069,592), and a rejection of Claim 14 as being unpatentable over Suguro.

Applicants acknowledge with gratitude the indication that Claim 9 is only objected to

as depending on a rejected claim and would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicants also acknowledge with gratitude the indication that Claims 2-3 and 5 would be allowable if rewritten to overcome the rejection under the second paragraph of 35 U.S.C. §112.

Turning to the objection to the drawings, included herewith is a letter requesting the Examiner's approval of the addition of the legend "PRIOR ART" to FIG. 1 as suggested by the Examiner in the outstanding Action. Accordingly, it is believed the requested drawing change should be approved and that the objection to FIG. 1 should be withdrawn.

With regard to the rejection of Claims 1-7 and 13-15 under the second paragraph of 35 U.S.C. §112 and the objections to Claims 1 and 4, it is first noted that the cancellation of Claims 2, 3, and 5 renders the rejection thereof under the second paragraph of 35 U.S.C. §112 moot. In addition, the above claim amendments are believed sufficient to overcome the objections made as to Claims 1 and 4 and to insure that Claims 1, 4, 6-8, and 13-15 fully comply with the second paragraph of 35 U.S.C. §112 so that it is believed that this objection as to Claims 1 and 4 and the second paragraph of 35 U.S.C. §112 rejection applied to still pending Claims 1, 4, 6-8, and 13-15 should be withdrawn.

Moreover, as the allowable subject matter noted as to Claims 2, 5, and 9, dealing with the matching circuit element and the capacitive coupling element as set forth at page 6 of the outstanding Office Action, has been incorporated into both Claims 1 and 4 along with the cancellation of Claims 2, 5, and 9, it is believed the rejection of Claim 1 as being anticipated by Suguro under 35 U.S.C. §102 and that of Claim 4 as being obvious over Suguro in view of Wass under 35 U.S.C. §103 should also be withdrawn. As Claims 6 and 7 depend on Claim 4, it is believed that these claims should now be indicated as allowable along with base Claim 4.

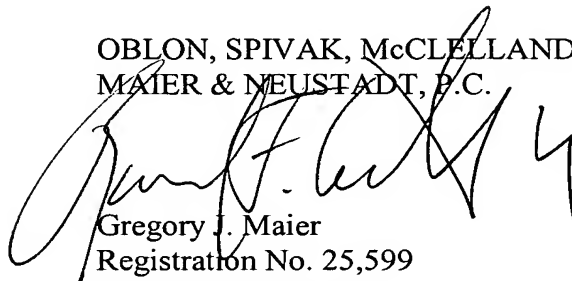
Similarly, as the allowable subject matter noted as to Claims 2, 5, and 9, dealing with the matching circuit element and the capacitive coupling element as set forth at page 6 of the outstanding Office Action, has been incorporated into base independent Claim 8 and base independent Claim 13, these claims should now be considered to be allowable as should Claims 10-12 that depend from base independent Claim 8 and Claims 14 and 15 that depend from base independent Claim 13.

Finally, as new Claim 16 includes the subject matter noted to be allowable in canceled Claim 3 at page 6 of the outstanding Office Action, it is believed that Claim 16 should now also be indicated as allowable.

In light of the foregoing and as no other issues are believed to remain outstanding relative to this application, it is respectfully submitted that this application is clearly in condition for formal allowance and an early and favorable action to that effect is, therefore, respectfully requested.

Respectfully submitted,

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IN THE SPECIFICATION

Please amend the paragraph starting at line 11 of page 17 and ending at line 5 of page 18 as shown in the attached marked-up copy to read as follows:

A rod-like antenna 122 corresponding to a first antenna is retractably arranged in the sleeve 114 (movable in the direction denoted by the arrows A and B in FIGS. 2 and 3). A linear antenna element 123 having a length corresponding to $\lambda/2$ is coaxially arranged on the rod-like antenna 122 with the meandering antenna element 119 formed on the flexible substrate 118. When the antenna 11 is extended as shown in FIG. 3, the proximal end of the linear antenna element 123 is electrically connected to the capacitive coupling section 124 formed on the flexible substrate 118, with the result that the linear antenna element [124] 123 is electrically connected to the matching circuit 120. Also, the rod-like antenna 122 is provided at one end with a first stopper 125 which is abutted to the top portion of the antenna cap 110 to regulate the retracted position of the rod-like antenna 122 when retracted, and is also provided at the other end with a second stopper 126 which is also abutted to the bottom portion of the frame 111 to regulate the extended position of the rod-like antenna 122 when the rod-like antenna 122 is extended.

IN THE CLAIMS

1. (Amended) An antenna structure [arranged] in a mobile radio apparatus [terminal] having a [body including a] holding [section] unit configured to hold [an] the antenna structure and a [mobile terminal circuit section housed in said body,] radio unit configured to transmit and receive a radio signal, the antenna structure comprising:

a [first] flexible substrate mounted within [said] the holding [section] unit;
[a meander-shaped] an antenna pattern formed on the flexible substrate;
a matching circuit element formed on the flexible substrate and configured to substantially match the impedances of [said] the antenna pattern and [a mobile terminal circuit section] the radio unit; and

a capacitive coupling element formed on the flexible substrate and configured to [achieve] couple the antenna pattern with the matching circuit by a capacitive coupling [between said antenna pattern and said matching circuit].

2. (Canceled).

3. (Canceled).

4. (Amended) An antenna structure arranged in a mobile [terminal] radio apparatus having a [body including a] holding [section] unit configured to hold [an] the antenna structure and a [mobile terminal circuit section housed in said body] radio unit configured to transmit and receive a radio signal, the antenna structure comprising:

a first antenna element [extending] configured to extend substantially linearly;
an antenna [support mechanism] supporting unit configured to support the first antenna element, arranged within [an antenna] the holding [section] unit[, and to permit the first antenna element to be withdrawn from the body of a mobile terminal and to be returned into said body so as to be housed in said body];



a flexible substrate mounted within [said] the holding [section] unit and arranged around [said] the first antenna element [withdrawn from said body];

a second antenna pattern formed [bent] on [said] the flexible substrate;

a matching circuit formed on the flexible substrate configured to [mach] match the [impedance] impedances of [said second] the first antenna element [with the impedance of the mobile terminal section of] and the second antenna pattern; and

a capacitive coupling element formed on the flexible substrate and configured to selectively couple the first antenna element and the second antenna pattern with [said] the matching [element] circuit by a capacitive coupling.

5. (Canceled).

6. (Amended) The antenna structure according to claim 4, wherein [said] the capacitive coupling element selectively couples [said] the first antenna element with [said] the matching circuit when [said] the first antenna element is withdrawn from [said body] the holding unit, and releases the capacitive coupling between [said] the first antenna element and [said] the matching circuit when the first antenna is housed in [said body] the holding unit.

7. (Amended) The antenna structure according to claim 4, wherein [said] the capacitive coupling element selectively couples [said] the second antenna pattern with [said] the matching circuit when [said] the first antenna element is housed in [said body] the holding unit.

8. (Amended) A mobile [terminal] radio apparatus, comprising:

a first antenna element [extending] configured to extend substantially linearly [along an antenna axis];

a body including a housing [section for housing] unit configured to house the [said]

first antenna element;

an antenna [support mechanism] supporting unit configured to support [said] the first antenna element, housed in [said] the housing unit [section, and to permit said first antenna element to be withdrawn from the body of a mobile terminal along the antenna axis and to be retracted into said body along the antenna axis so as to be housed in said body];

a flexible substrate mounted within [said] the housing unit [section] and arranged around [said] the first antenna element [withdrawn from said body];

a second antenna pattern formed [bent] on [said] the flexible substrate;

[a mobile terminal circuit mounted within said body and configured to receive and transmit a mobile terminal signal through said first antenna element and said second antenna pattern;]

a matching circuit element formed on the flexible substrate configured to substantially match the impedance of [said] the first antenna element with the impedance of the second antenna pattern [with the impedance of the mobile terminal circuit]; and

a capacitive coupling element formed on the flexible substrate configured to selectively couple the first antenna element and the second antenna pattern with [said] the matching circuit element by a capacitive coupling.

9. (Canceled).

10. (Amended) The mobile [terminal] radio apparatus according to claim 8, wherein [said] the capacitive coupling element selectively couples [said] the first antenna element with [said] the matching circuit element when [said] the first antenna element is withdrawn from [said] the body, and [opened] releases the capacitive coupling between the first antenna element and [said] the matching circuit element when the first antenna element is housed in [said] the body.



11. (Amended) The mobile [terminal] radio apparatus according to claim 8, wherein [said] the capacitive coupling element selectively couples [said] the second antenna pattern with [said] the matching circuit element when [said] the first antenna element is housed in [said] the body.

12. (Amended) The mobile [terminal] radio apparatus according to claim 8, wherein [said] the body has front and rear sides, and a loud speaker configured to reproduce a sound from the front side [of said body] and [said] the flexible substrate [are] is arranged on the rear side relative to an antenna axis.

13. (Amended) A mobile [terminal] radio apparatus, comprising:
a flexible substrate;
a body including a housing [section for housing said] unit configured to house the flexible substrate, [said] the housing [section] unit protruding from [said] the body along a first [reference] axis;

[an] a first antenna pattern formed on [said] the flexible substrate, [said] the first antenna pattern extending in a meandering fashion along a second [reference] axis, and [said] the first and second [reference] axes forming an angle falling within a range of between 45° and 90°;

a [mobile terminal circuit] radio unit section housed in [said] the body and configured to receive and transmit a [mobile terminal] radio signal through [said] the first antenna pattern;

a matching circuit element formed on the flexible substrate and configured to substantially match the impedance of [said] the first antenna pattern with the impedance of the [mobile terminal circuit section] radio unit; and

a capacitive coupling element formed on the flexible substrate and configured to

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couple the [second] first antenna pattern with [said] the matching circuit element.

14. (Amended) The mobile radio apparatus according to claim 13, wherein [said] the angle is substantially equal to 60°

15. (Amended) The mobile [terminal] radio apparatus according to claim 13, further comprising:

a second antenna element [extending] configured to extend substantially linearly; and
an antenna [support mechanism] supporting unit configured to support [said] the second antenna element, arranged in [a] the housing [section] unit, and configured to permit [said] the second antenna element to be withdrawn from the body of the [mobile terminal] radio apparatus along [said] the first [reference] axis and returned into [said] the body along said first [reference] axis [so as to be housed], [said] the flexible substrate being arranged around [said] the second antenna element withdrawn from [said] the body.

16. (New).

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